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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: J. Carman )  
FOR: METHODS FOR PRODUCING )  
APOMICTIC PLANTS )  
SERIAL NO.: 09/576,623 )  
FILED: May 23, 2000 )  
EXAMINER: M. Kimball )  
ART UNIT: 1638 )  
DOCKET: T4088.CONT )

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PETITION TO MAKE SPECIAL UNDER 37 C.F.R. § 1.102

Commissioner for Patents  
Washington, D.C., 20231

Sir:

This communication is a Petition To Make Special Under 37 C.F.R. § 1.102. Enclosed herewith is a check in the amount of \$130.00 for payment of the fee associated with this Petition, as set forth in 37 C.F.R. § 1.17(i). Authorization is hereby given for the Commissioner to charge any additional fee or to credit any overpayment in connection with this Petition to Deposit Account No. 50-0836.

Applicant respectfully submits that the present Petition may be granted on either of both of the following grounds set forth in MPEP § 708.02:

VIII. Special Examining Procedure for Certain New Applications-Accelerated Examination; and

XII. Special Status for Applications Relating to Biotechnology Filed by Applicants Who Are Small Entities.

I. Accelerated Examination Under MPEP § 708.02(VIII)

Under MPEP § 708.02(VIII), a new application, one that has not received any examination by the examiner, may be granted special status provided that Applicant complies with each of the following items:

- A. Submits a petition to make special accompanied by the fee set forth in 37 C.F.R. § 1.17(i);
- B. Presents all claims directed to a single invention, or if the Office determines that all of the claims presented are not obviously directed to a single invention, will make an election without traverse as a prerequisite to the grant of special status;
- C. Submits a statement that a pre-examination search was made, listing the field of search by class, subclass, publication, and the like;
- D. Submits one copy of each of the references deemed most closely related to the subject matter encompassed by the claims, if such references are not already of record; and
- E. Submits a detailed discussion of the references, pointing

out with the particularity required by 37 C.F.R. §§ 1.111(b) and (c) how the claimed subject matter is patentable over the references.

These requirements are fulfilled as follows.

This application is a continuation of U.S. serial number 09/018,875. This application has not received any examination by the examiner.

This paper is a Petition To Make Special accompanied by the fee required under 37 C.F.R. § 1.17(i).

It is respectfully submitted that the claims presented in the application are directed to a single invention. The present application is a continuation of U.S. Serial No. 09/018,875, which prior application was not subjected to a restriction requirement by the Office. If the Office determines that all of the claims presented are not obviously directed to a single invention, Applicant will make an election without traverse as a prerequisite to the grant of special status.

A pre-examination search has been conducted. Enclosed herewith is a copy of a form PTO-1449 that has been submitted in an Information Disclosure Statement filed in this application. All of the references listed on this form PTO-1449 were of record in prior application no. 09/018,875, and thus copies were submitted to the Office by Applicant or were cited by the Office. Therefore, no copies of these references are enclosed herewith.

None of these references are closely related to the present invention. The "most closely related" references, however, will now be discussed.

That, 42 Int'l Rice Comm'n Newsletter 28-34 (1993), discloses: "Two new apomictic rice hybrids were released in China. Selecting mutants for apomixis from natural tetraploids or from interspecific or intergeneric wide crosses in rice is suggested. Genetic analysis at the molecular level, which is supported by FAO in China, could lead ultimately to the fixation of heterosis in inbreds without the need for hybrids." Thus, That teaches selecting mutants for apomixis from natural tetraploids or from interspecific or intergeneric wide crosses in rice. That fails to teach or suggest an ability for producing apomixis by hybridization in rice without requiring mutation. That also fails to teach preselecting parents for female reproductive traits and photosensitivity, nor does it teach the type of day length responses or reproductive traits claimed in the present application.

Bashaw et al., Apomictic Grasses, in 2 Principles of Cultivar Development 40-82 (1987), is a review of apomixis that includes a discussion of mechanisms of apomixis, uses of apomixis, and identification of apomictic plants. Bashaw does not teach preselecting parents for female reproductive traits and photosensitivity, nor does it teach the type of day length

responses or reproductive traits claimed in the present application. Bashaw teaches that apomixis is caused by "no more than two genes" (Bashaw at 45) or mutation.

B.K. Kindiger, Apomictic Maize, U.S. Patent No. 5,710,367 (1998), discloses apomictic maize/*Tripsacum* hybrids having a ratio of maize chromosomes to *Tripsacum* chromosomes of at least 30:9. This patent contemplates a model of apomixis wherein two independently segregating loci are responsible for conferring apomixis: one dominant gene N for controlling nonreduction of the egg and one dominant gene A for controlling apomictic development of the egg (column 6, lines 20-44). Kindiger fails to disclose or suggest preselecting parents for female reproductive traits and photosensitivity, nor does it teach the type of day length responses or reproductive traits claimed in the present application.

In view of the above, it is respectfully submitted that the requirements of MPEP § 708.02(VIII) have been complied with, and therefore granting of the present Petition to make special is respectfully requested.

## II. Special Status Under MPEP § 708.02(XII)

Under MPEP § 708.02(XII), special status may be granted to applicants who file a petition with the petition fee under 37 C.F.R. § 1.17(i) requesting special status and:

- A. Stating that small entity status has been established or include a statement establishing small entity status;
- B. Stating that the subject of the patent application is a major asset of the small entity; and
- C. State that the development of the technology will be significantly impaired if examination of the patent application is delayed, including an explanation of the basis of the making the statement.

These requirements for special status have been complied with as will be described below.

The present paper is a Petition To Make Special and includes the fee set forth at 37 C.F.R. § 1.17(i).

Small entity status has been established in the previous application, and Applicant respectfully submits that small entity status is appropriate and proper in the present application.

The subject of the present application is a major asset of the small entity. The present application has been assigned by the inventor, John G. Carman, to Utah State University, which qualifies as a small entity by virtue of being a non-profit university of higher learning. Utah State University has licensed the present application to Apomyx, Inc., which also qualifies as a small entity by virtue of having fewer than 500 employees. By virtue of the license, Apomyx, Inc. is the party in interest with respect to the subject matter of the present application. Further, the subject

matter of the present application is a major asset of Apomyx, Inc.

The development of the technology will be significantly impaired if examination of the patent application is delayed. Apomyx, Inc. is currently raising venture capital to fund the further development of the invention. Investors are reluctant to commit the large sums of money necessary to fund development of the technology without the assurance provided by an issued U.S. patent. Without such funds, further development of the technology will be delayed. Therefore, the prompt examination of the present application is crucial to obtaining the venture capital, and a delay in examination of the present application will result in significant impairment of development of the technology.

In view of the above, it is respectfully submitted that the present application is entitled to special status under the requirements of MPEP § 708.02(XII). Therefore, granting of this Petition is respectfully requested.

Dated this 27<sup>th</sup> day of January, 2001.

Respectfully submitted,



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**CERTIFICATE OF DEPOSIT UNDER 37 C.F.R. § 1.8**

Date of Deposit:

January 27, 2001

I hereby certify that the enclosed Response to Notice to File Missing Parts, Petition Under 37 C.F.R. § 1.136(a), Petition Under 37 C.F.R. § 1.102, Copy of Notice to File Missing Parts, Check No. 3348 for \$1285.00, and postcard in the name of John G. Carman for METHODS FOR PRODUCING APOMICTIC PLANTS are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231, on the date indicated above.

Respectfully submitted this 27<sup>th</sup> day of January, 2001.

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